

## **PRODUCTION DATA REPORT**

Project 1108-13

Supplementary Report Twenty-five

to

**FOURDRINIER KRAFT BOARD INSTITUTE, INC.**

February 1, 1959

THE INSTITUTE OF PAPER CHEMISTRY

Appleton, Wisconsin

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The production data contained herein represent the production of linerboard as reported by the following Fourdrinier Kraft Board Institute member mills for the fourth quarter of 1958:

The Chesapeake Corporation of Virginia

Continental Can Company, Inc.

Gaylord Container Corporation, Division of Crown Zellerbach Corporation

Georgia Kraft Company

International Paper Company

North Carolina Pulp Co. & Kieckhefer Container Co.

Olin Mathieson Chemical Corp., Forest Products Division

Owens-Illinois Glass Company, Mill Division

St. Joe Paper Company

St. Regis Paper Company

Southern Paperboard Corporation

Union Bag-Camp Paper Corporation

West Virginia Pulp and Paper Company

As in previous reports, the data have been tabulated according to (1) total production by quarters and (2) production by grades by quarters. The total production data for the fourth quarter of 1958 are given in Table I together with, for purposes of comparison, the total quarterly production data for 1955, 1956, 1957, and the first, second and third quarters of 1958. The total production data by quarters from 1955 to the present are illustrated graphically in Figure 1.

Production data for the major grades are shown in Table II on a quarterly basis for 1957 and 1958 and for all grades in Table III. In addition, percentage of total production by grades is given in Table IV for 1957 and 1958. These percentage figures are based on the total production per quarter computed separately with the miscellaneous figure included and with the miscellaneous figure excluded. The current tonnage data for the major grades--namely, 26 lb., 33 lb., 38 lb., 42 lb., 47 lb., 69 lb., 90 lb., and miscellaneous--are illustrated graphically in Figures 2 through 9, respectively, together with the production for the previous quarters. Also shown in Figures 2 through 9 is the percentage of total production which each grade represents.

In order to give a better perspective of the above data, the tonnages for the major grades have been plotted on a semi-logarithmic scale (see Figure 10) for the purpose of comparing the change in production of these grades. A useful measure is the "percentage change" which is defined as the change in production in tons for the present quarter divided by the tonnage level of the previous quarter. The advantage of semi-log graphs in this case is that the "percentage change" may be compared readily even though the magnitude of the tonnage levels may be vastly different. When two lines are parallel (regardless of magnitude), the "percentage change" of these two items is the same. When two lines are not parallel, the one with the greater (steeper) slope has the higher "percentage change."

There are numerous comparisons which may be of interest, some of which are the following:

1. The total production of all grades for the fourth quarter of 1958 was the highest total since the second quarter of 1957 and was only slightly lower than that figure. (See Table I).
2. Total production continued to increase during the fourth quarter of 1958 after the low for the year was reached during the second quarter and a substantial increase was posted during the third quarter.
3. Compared with the tonnages for the third quarter, tonnages of the following grades were higher during the fourth quarter: 26 lb., 33 lb., 42 lb., 47 lb., and 69 lb. On the same basis of comparison, tonnages of the following grades were lower during the fourth quarter: 38 lb., 90 lb., and miscellaneous. (See Table II).

TABLE I

TOTAL TONNAGE OF ALL GRADES

	1955	1956	1957	1958
1st Quarter	886,487	972,607	932,706	836,013
2nd Quarter	945,631	995,265	946,959	793,764
3rd Quarter	965,247	959,662	924,262	919,520
4th Quarter	959,008	952,295	914,979	940,090
Total	3,756,373	3,879,829	3,718,906	3,489,387

TABLE II  
TONNAGE OF MAJOR GRADES BY QUARTERS FOR 1957 AND 1958

Grade	<u>1957</u>			
	1st Quarter	2nd Quarter	3rd Quarter	4th Quarter
26 lb.	90,748	83,616	65,968	67,656
33 lb.	56,452	55,636	53,369	57,990
38 lb.	73,283	82,907	86,731	86,745
42 lb.	414,657	416,928	418,698	417,787
47 lb.	22,150	27,665	26,670	21,386
69 lb.	107,473	115,538	117,382	115,902
90 lb.	61,268	54,779	57,479	52,896
Misc.	78,240	81,138	74,027	73,976
<u>1958</u>				
26 lb.	41,837	48,393	50,598	52,946
33 lb.	49,694	52,791	58,904	58,951
38 lb.	90,207	82,493	108,398	94,499
42 lb.	363,902	322,583	383,150	399,133
47 lb.	20,870	18,322	19,339	19,741
69 lb.	116,068	101,638	103,106	136,396
90 lb.	50,325	41,145	62,951	60,976
Misc.	78,244	95,493	91,419	90,600

TABLE III  
TOTAL TONNAGE BY GRADES

Grade	1957				1958			
	1st Qtr.	2nd Qtr.	3rd Qtr.	4th Qtr.	1st Qtr.	2nd Qtr.	3rd Qtr.	4th Qtr.
26 lb.	90,748	83,616	65,968	67,656	41,837	48,393	50,598	52,946
28 lb.	2,085	2,622	1,626	937	518	706	587	268
30 lb.	1,426	791	1,525	1,267	7,171	1,462	1,206	892
32 lb.	556	1,289	689	885	--	1,166	1,044	851
33 lb.	56,452	55,636	53,369	57,990	49,694	52,791	58,904	58,951
35 lb.	41	--	15	--	--	--	--	103
36 lb.	418	55	--	344	47	--	14	--
37 lb.	--	--	--	--	--	--	--	50
38 lb.	73,283	82,907	86,731	86,745	90,207	82,493	108,398	94,499
42 lb.	414,657	416,928	418,698	417,787	363,902	322,583	383,150	399,133
45 lb.	19,023	19,760	14,749	11,505	14,546	14,622	12,170	12,502
46 lb.	--	--	184	--	--	--	--	--
47 lb.	22,150	27,665	26,670	21,386	20,870	18,322	19,339	19,741
50 lb.	1,371	471	411	--	394	750	467	888
51 lb.	124	--	--	50	--	--	--	--
52 lb.	624	601	1,002	490	759	355	743	352
56 lb.	--	--	--	--	--	--	26	65

TABLE III--Continued  
TOTAL TONNAGE BY GRADES

Grade	1957				1958			
	1st Qtr.	2nd Qtr.	3rd Qtr.	4th Qtr.	1st Qtr.	2nd Qtr.	3rd Qtr.	4th Qtr.
60 lb.	625	424	111	--	199	87	85	--
62 lb.	--	--	37	--	--	10,162	16,787	--
64 lb.	387	656	1,926	4,556	1,182	1,496	1,760	10,513
65 lb.	1,232	1,154	413	277	--	30	102	15
67 lb.	--	613	--	--	--	--	--	--
69 lb.	107,473	115,538	117,382	115,902	116,068	101,638	103,106	136,306
72 lb.	328	--	--	--	--	--	--	--
75 lb.	--	114	975	--	--	70	5,740	--
76 lb.	195	202	194	215	--	--	275	230
85 lb.	--	--	81	115	--	--	646	--
90 lb.	61,268	54,779	57,479	52,896	50,325	41,145	62,951	60,976
Misc.	78,240	81,138	74,027	73,976	78,244	95,493	91,419	90,689



TABLE IV  
TOTAL TONNAGE BY GRADES, PER CENT

Grade	1957				1958			
	1st Qtr.	2nd Qtr.	3rd Qtr.	4th Qtr.	1st Qtr.	2nd Qtr.	3rd Qtr.	4th Qtr.
	With <sup>a</sup> out <sup>b</sup>	With <sup>a</sup> out <sup>b</sup>	With <sup>a</sup> out <sup>b</sup>	With <sup>a</sup> out <sup>b</sup>	With <sup>a</sup> out <sup>b</sup>	With <sup>a</sup> out <sup>b</sup>	With <sup>a</sup> out <sup>b</sup>	With <sup>a</sup> out <sup>b</sup>
26 lb.	9.7	8.8	7.1	7.4	8.0	5.0	5.5	5.6
	10.6	9.7				6.1	6.9	6.2
28 lb.	0.2	0.3	0.2	0.1	0.1	0.1	0.1	0.1
	0.2	0.1	0.2	0.1	0.2	0.2	0.1	0.1
30 lb.	0.2	0.1	0.2	0.1	0.2	0.9	0.9	0.1
	0.2	0.1	0.1	0.1	0.1	0.1	0.1	0.1
32 lb.	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
33 lb.	6.1	5.9	5.8	6.3	6.9	5.9	6.6	6.3
	6.6	6.4				6.7	7.6	6.9
35 lb.	c	--	c	--	--	--	--	c
	c	c	--	c	c	c	c	--
36 lb.	--	--	--	--	--	--	--	--
	--	--	--	--	--	--	--	--
37 lb.	--	--	--	--	--	--	--	c
	--	--	--	--	--	--	--	--
38 lb.	7.9	8.8	9.4	9.5	10.3	10.8	11.9	10.4
	8.6	9.6	10.2	10.3	11.8	11.8	11.8	11.1
42 lb.	44.5	44.0	45.3	45.7	49.7	43.5	48.0	46.2
	42.5	42.2	49.2	49.7	46.2	41.7	46.3	42.5

a Percentages based on the total production of all grades including miscellaneous.  
b Percentages based on the total production of all grades excluding miscellaneous.  
c Loss at 90 percent of one per cent after being rounded off.

TABLE IV--Continued  
TOTAL TONNAGE BY GRADES, PER CENT

Grade	1957				1958			
	1st Qtr. With <sup>a</sup> outb	2nd Qtr. With <sup>a</sup> outb	3rd Qtr. With <sup>a</sup> outb	4th Qtr. With <sup>a</sup> outb	1st Qtr. With <sup>a</sup> outb	2nd Qtr. With <sup>a</sup> outb	3rd Qtr. With <sup>a</sup> outb	4th Qtr. With <sup>a</sup> outb
45 lb.	2.0	2.2	2.1	2.3	1.7	1.8	1.3	1.3
46 lb.	--	--	--	--	--	--	--	--
47 lb.	2.4	2.6	2.9	3.1	2.5	2.3	2.1	2.1
50 lb.	0.1	0.2	0.1	--	c	0.1	0.1	0.1
51 lb.	c	--	--	c	--	--	--	--
52 lb.	0.1	0.1	0.1	0.1	0.1	c	0.1	c
56 lb.	--	--	--	--	--	--	c	c
60 lb.	0.1	0.1	c	c	c	c	c	--
62 lb.	--	--	--	--	--	1.3	1.8	2.0

Percentages based on the total production of all grades including miscellaneous.  
Grades are based on the total production of all grades excluding miscellaneous.  
Percentages are rounded off.

TABLE IV--Continued  
TOTAL TONNAGE BY GRADES, PER CENT

Grade	1957				1958			
	1st Qtr. With <sup>a</sup> out <sup>b</sup>	2nd Qtr. With <sup>a</sup> out <sup>b</sup>	3rd Qtr. With <sup>a</sup> out <sup>b</sup>	4th Qtr. With <sup>a</sup> out <sup>b</sup>	1st Qtr. With <sup>a</sup> out <sup>b</sup>	2nd Qtr. With <sup>a</sup> out <sup>b</sup>	3rd Qtr. With <sup>a</sup> out <sup>b</sup>	4th Qtr. With <sup>a</sup> out <sup>b</sup>
64 lb.	c	0.1	0.1	0.5	0.1	0.2	0.2	1.1
65 lb.	0.1	0.1	c	c	--	c	c	c
67 lb.	--	0.1	--	--	--	--	--	--
69 lb.	11.5	12.2	12.7	12.7	13.9	12.8	11.2	14.5
	12.6	13.3	13.8	13.8	15.3	14.6	12.5	16.1
72 lb.	c	--	--	--	--	--	--	--
75 lb.	--	c	0.1	--	--	c	0.6	--
76 lb.	c	c	c	c	--	--	c	c
85 lb.	--	--	c	c	--	--	0.1	--
90 lb.	6.6	5.8	6.3	5.8	6.0	5.2	6.8	6.5
Misc.	8.4	8.6	8.0	8.1	9.4	12.0	9.9	9.2

<sup>a</sup> Percentage based on the total production of all grades including miscellaneous.

<sup>b</sup> Percentage based on the total production of all grades excluding miscellaneous.

<sup>c</sup> Less than one-tenth of one per cent after being rounded off.

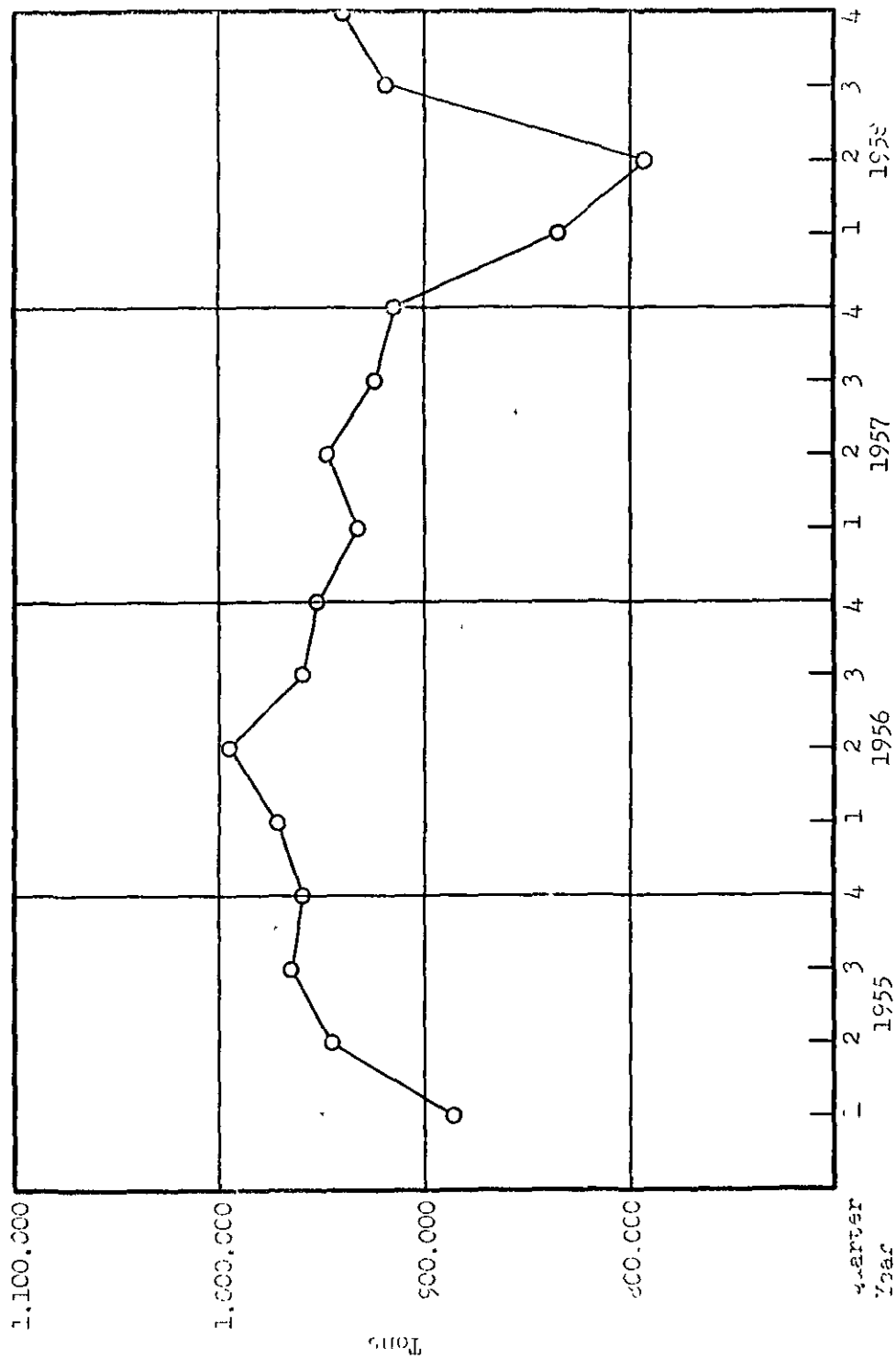


Figure 1. Paper Board Production of All Grades

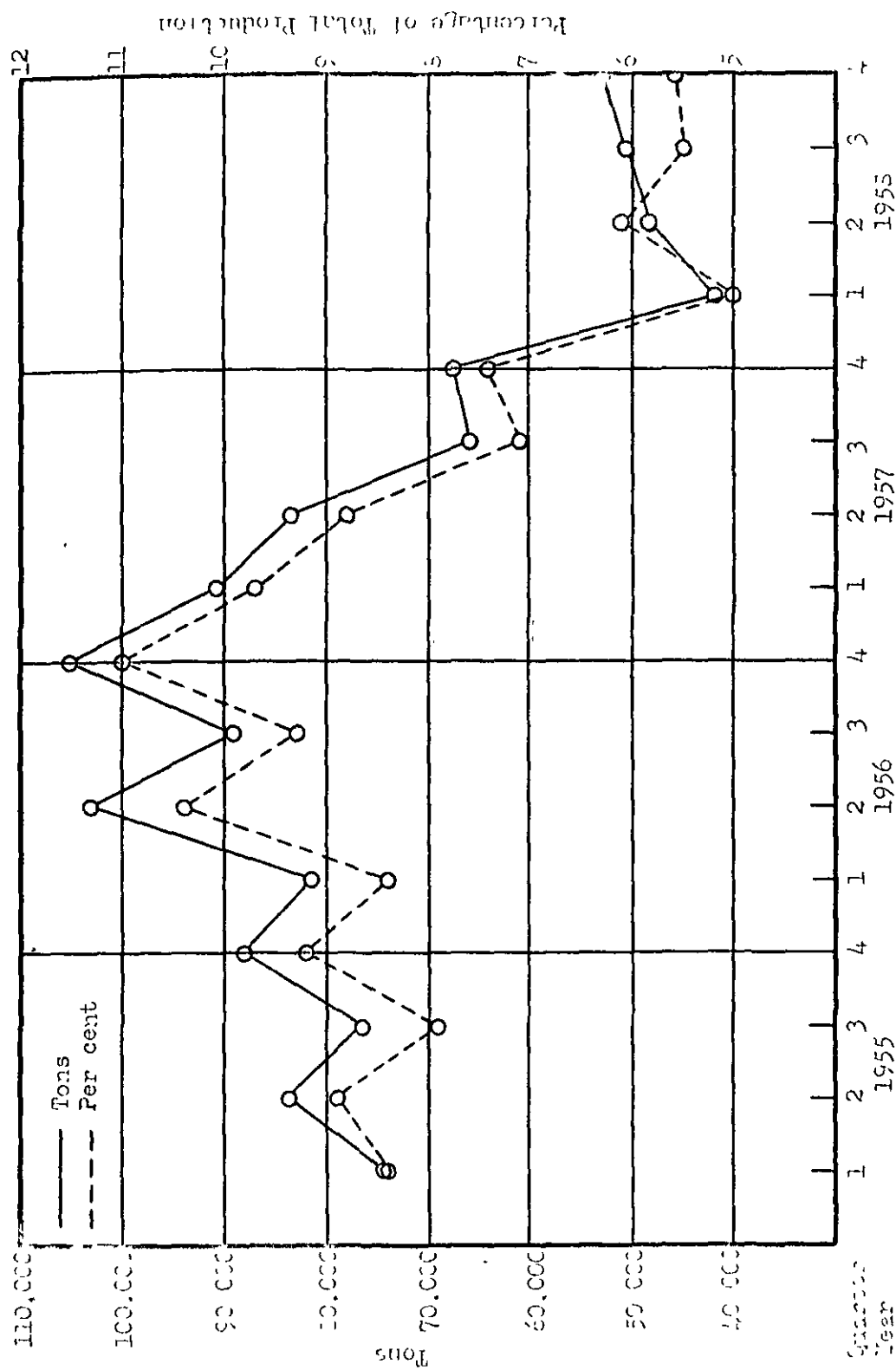


Figure 2. Production, 26-lb.

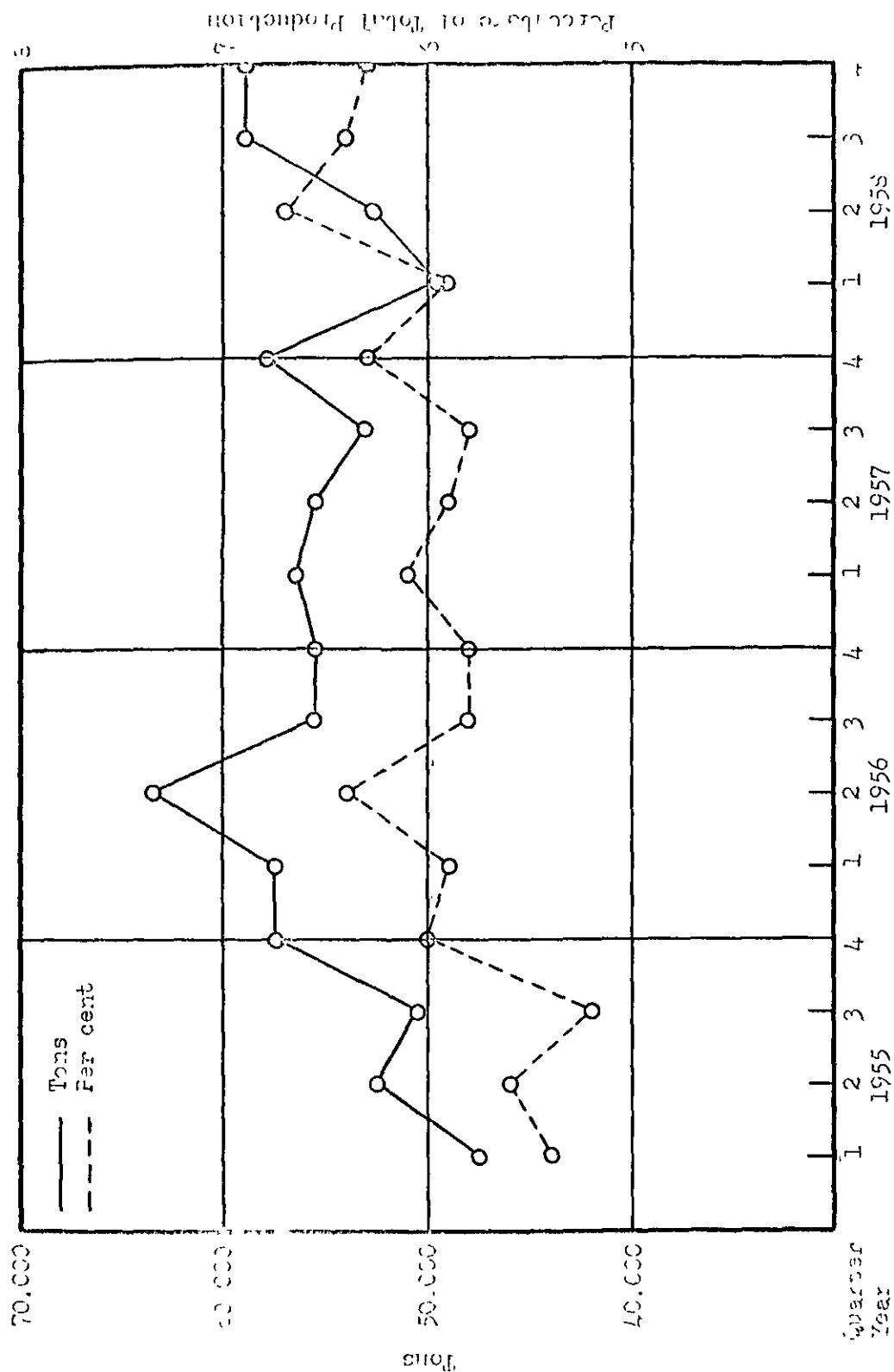


Figure 3. Production, 33-lb.

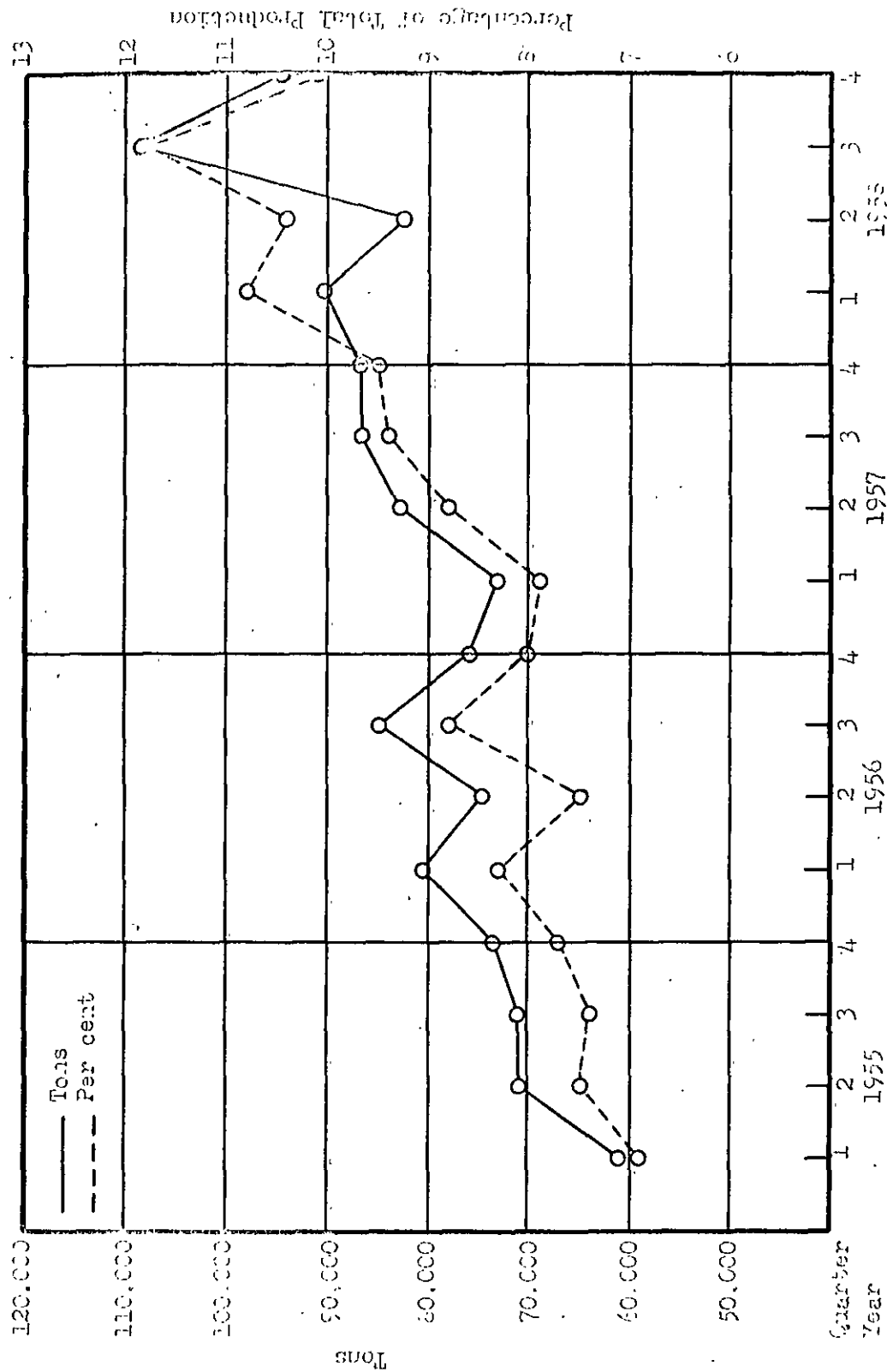


Figure 4. Production, 38-lb.

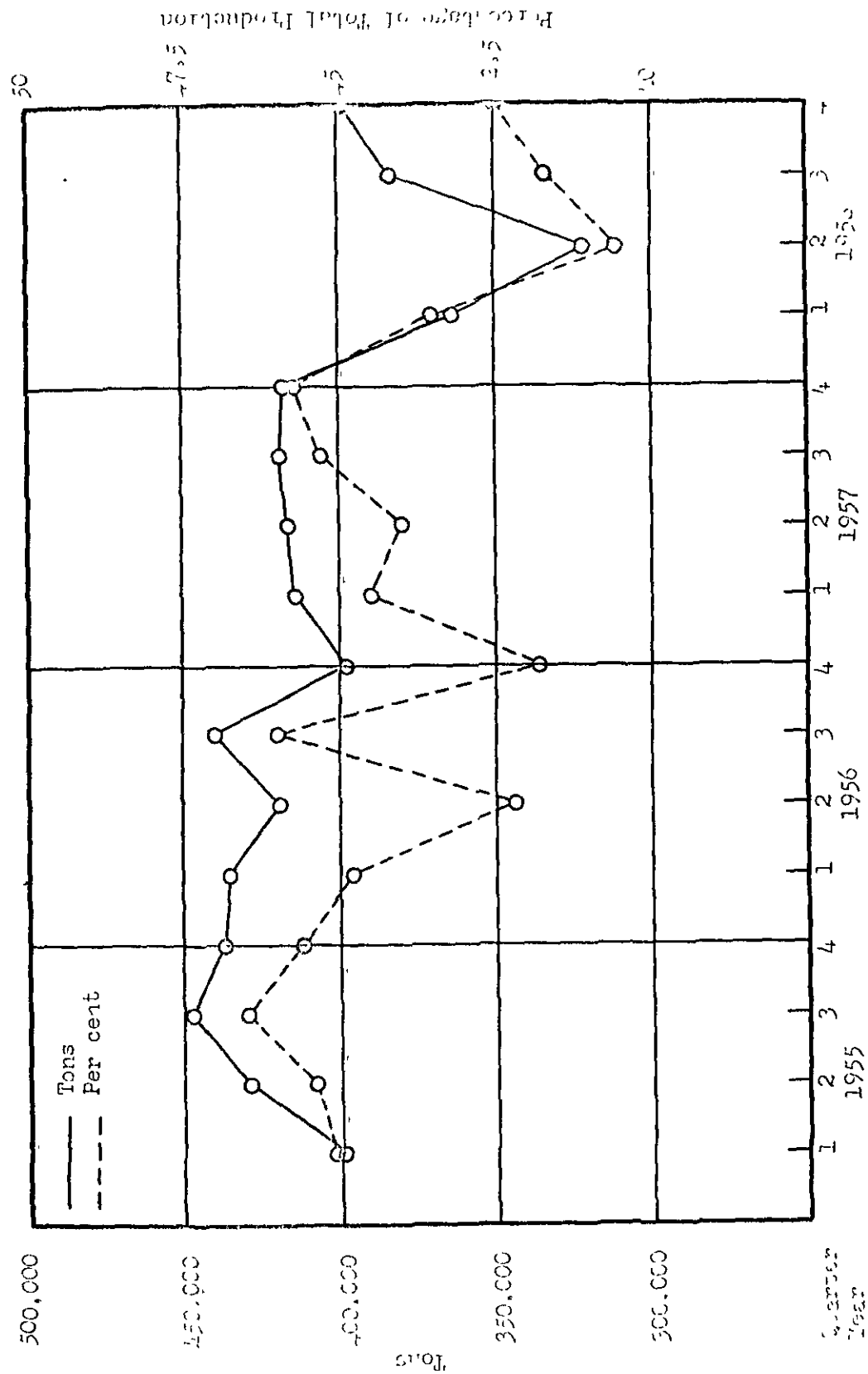
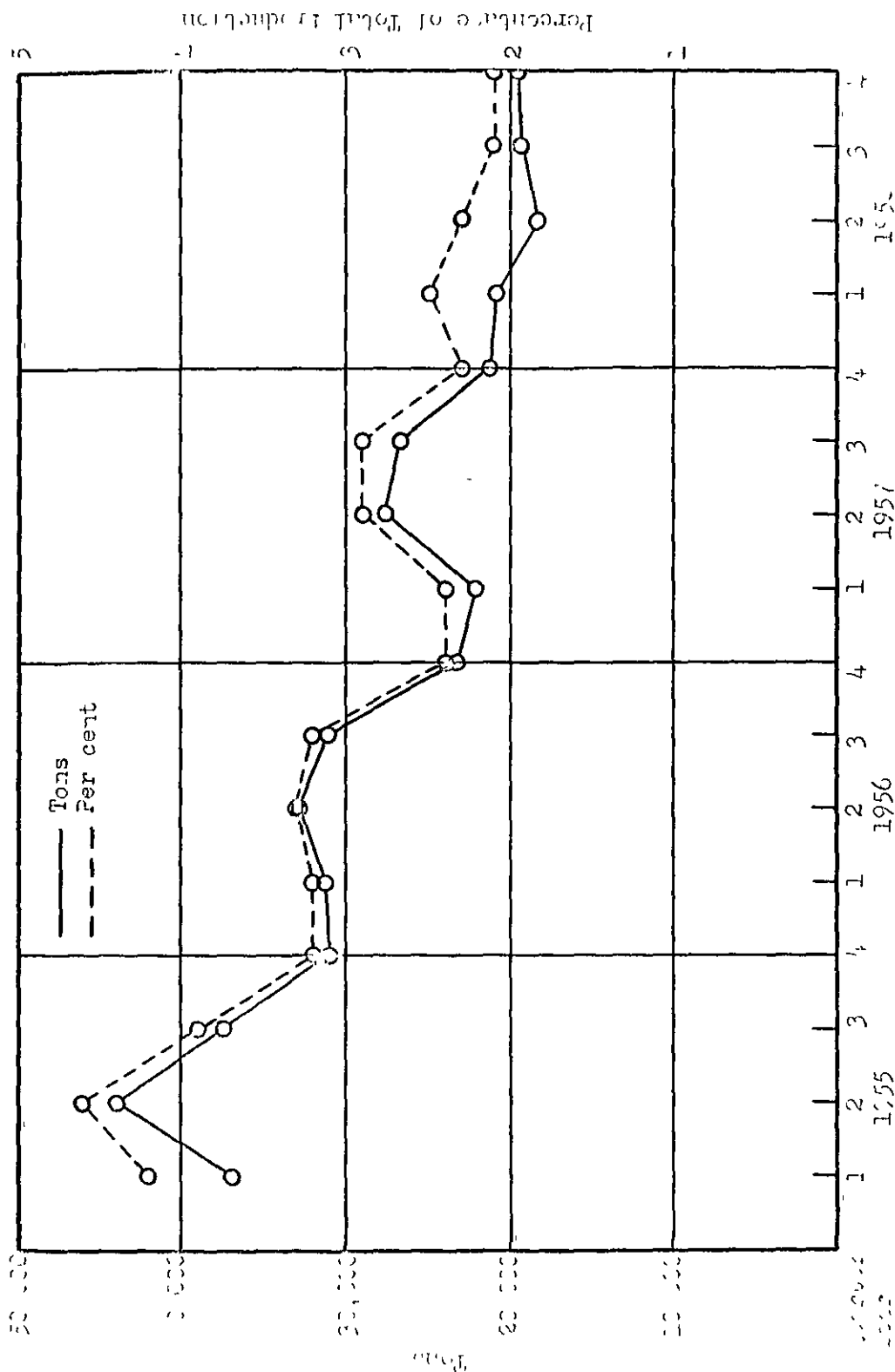


Figure 5. Production, '42-lb.





Production, 47-15.

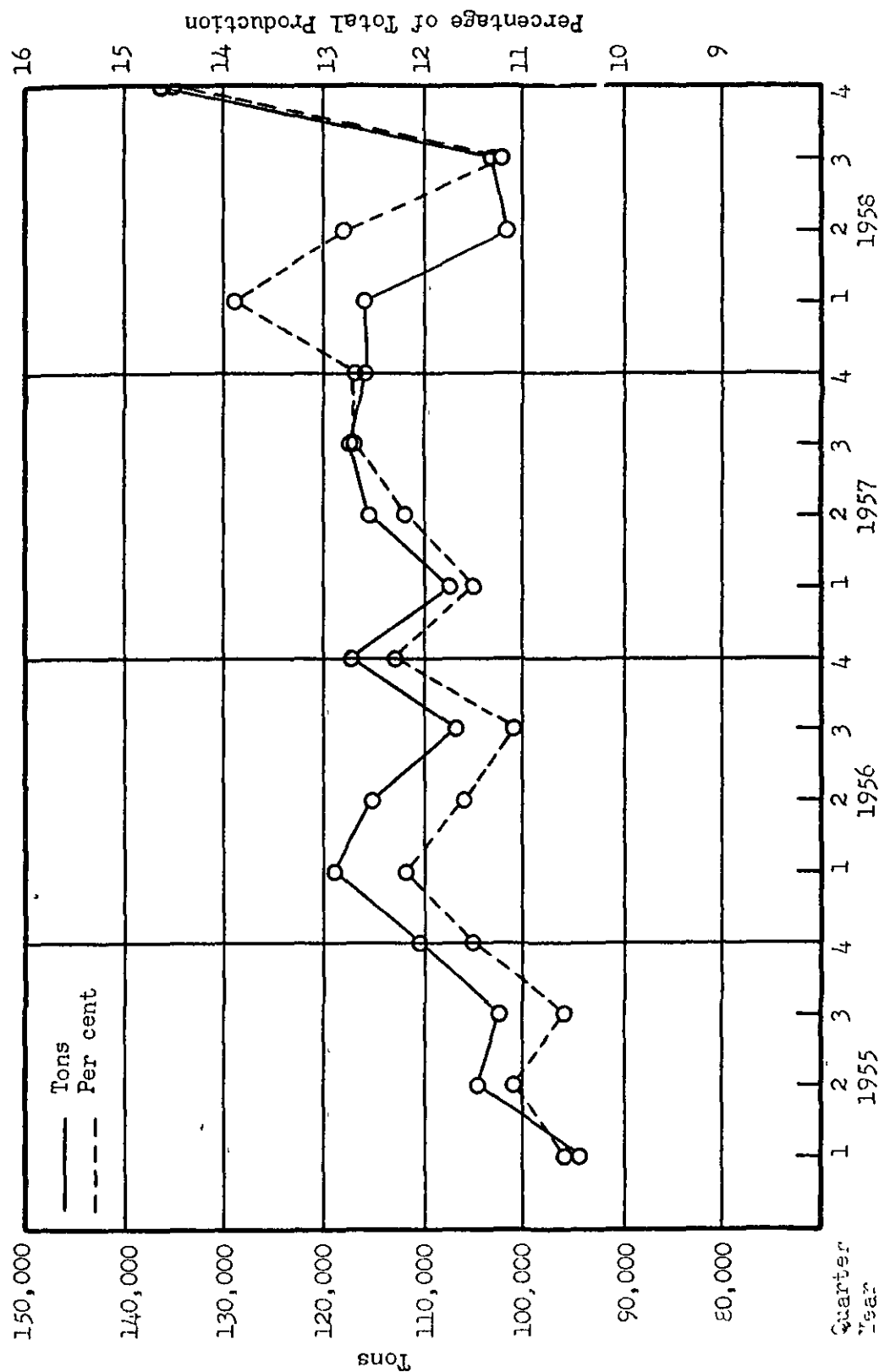


Figure 7. Production, 69-lb.

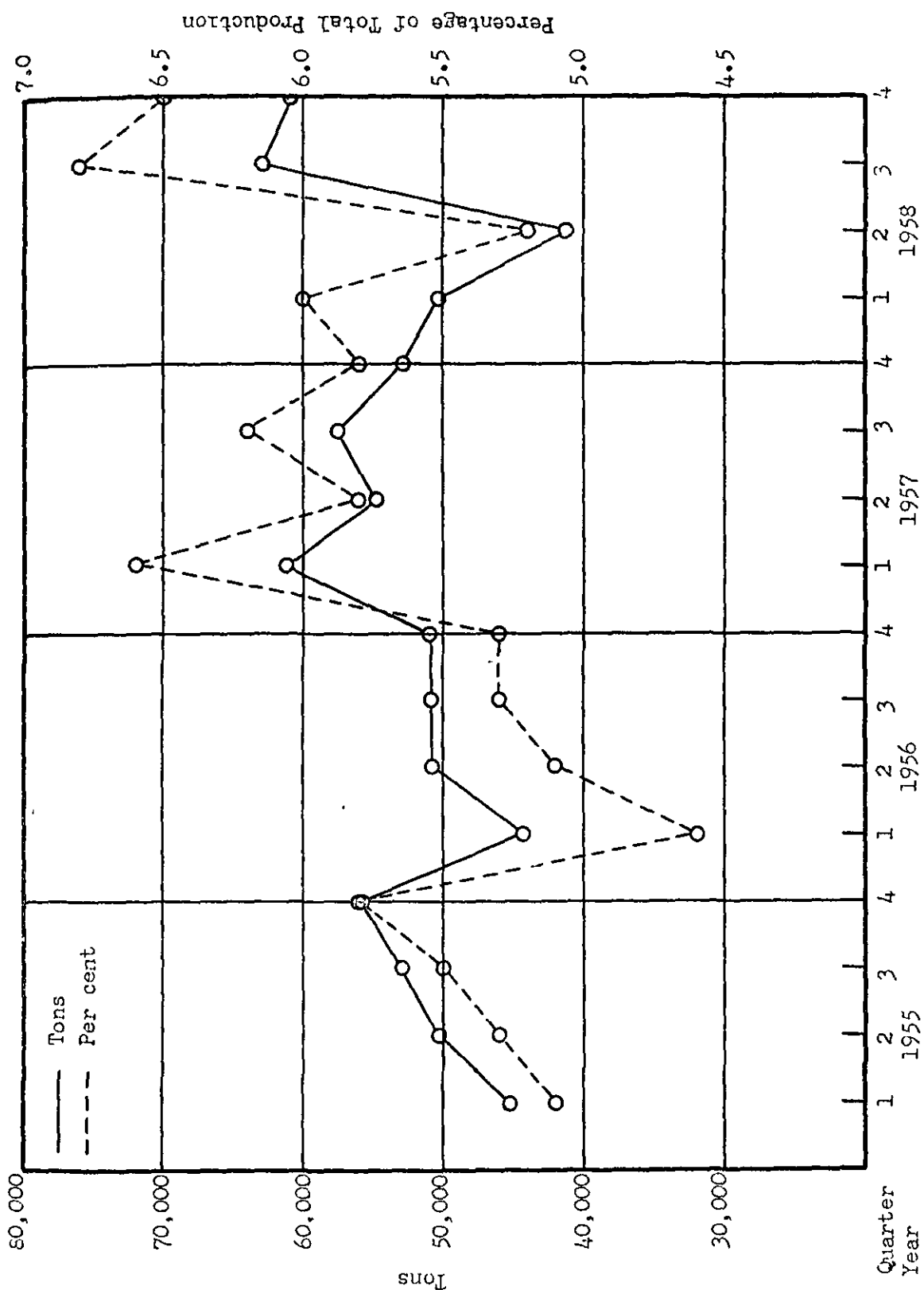


Figure 8. Production, 90-lb.

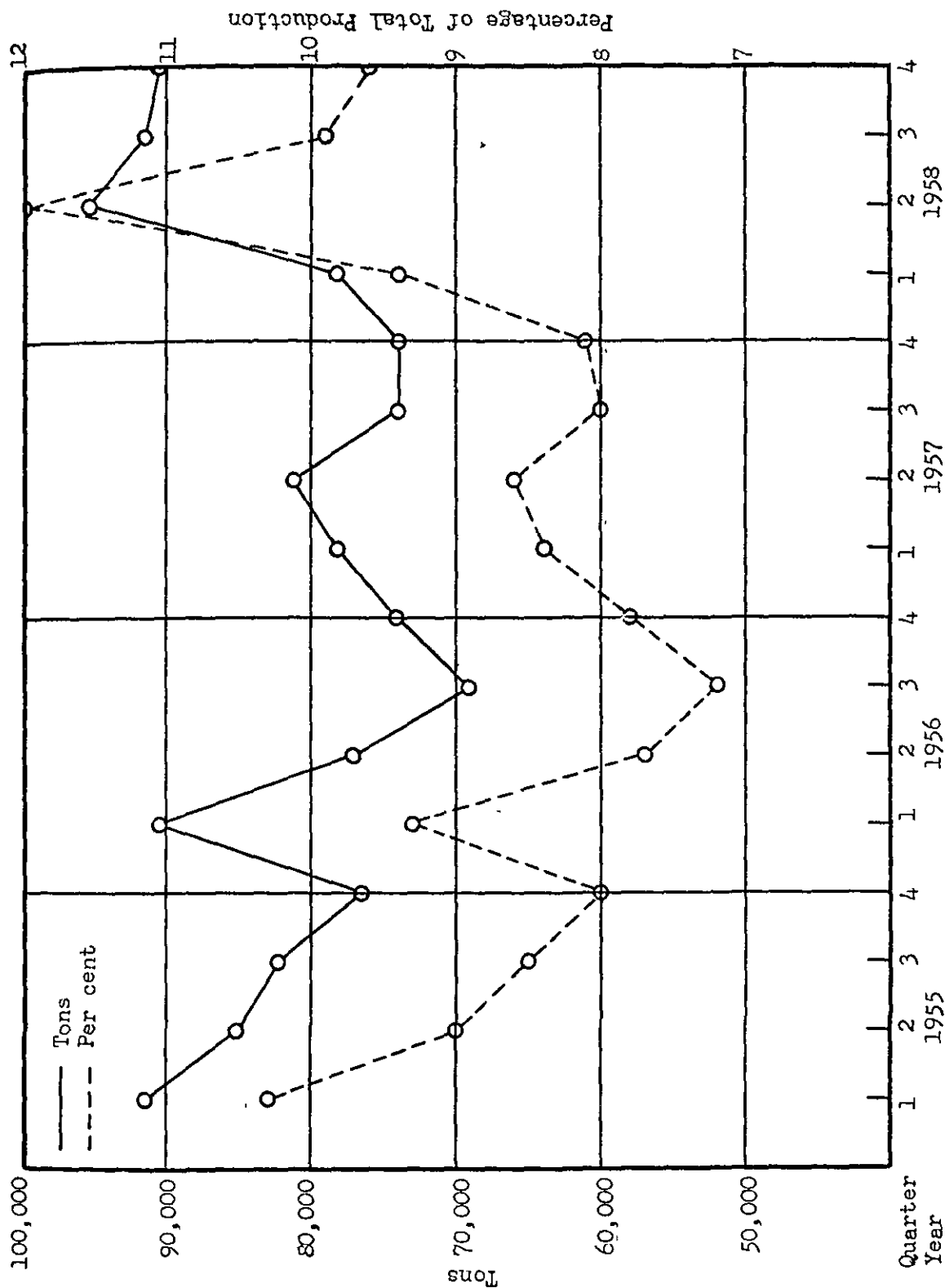


Figure 9. Production, Miscellaneous

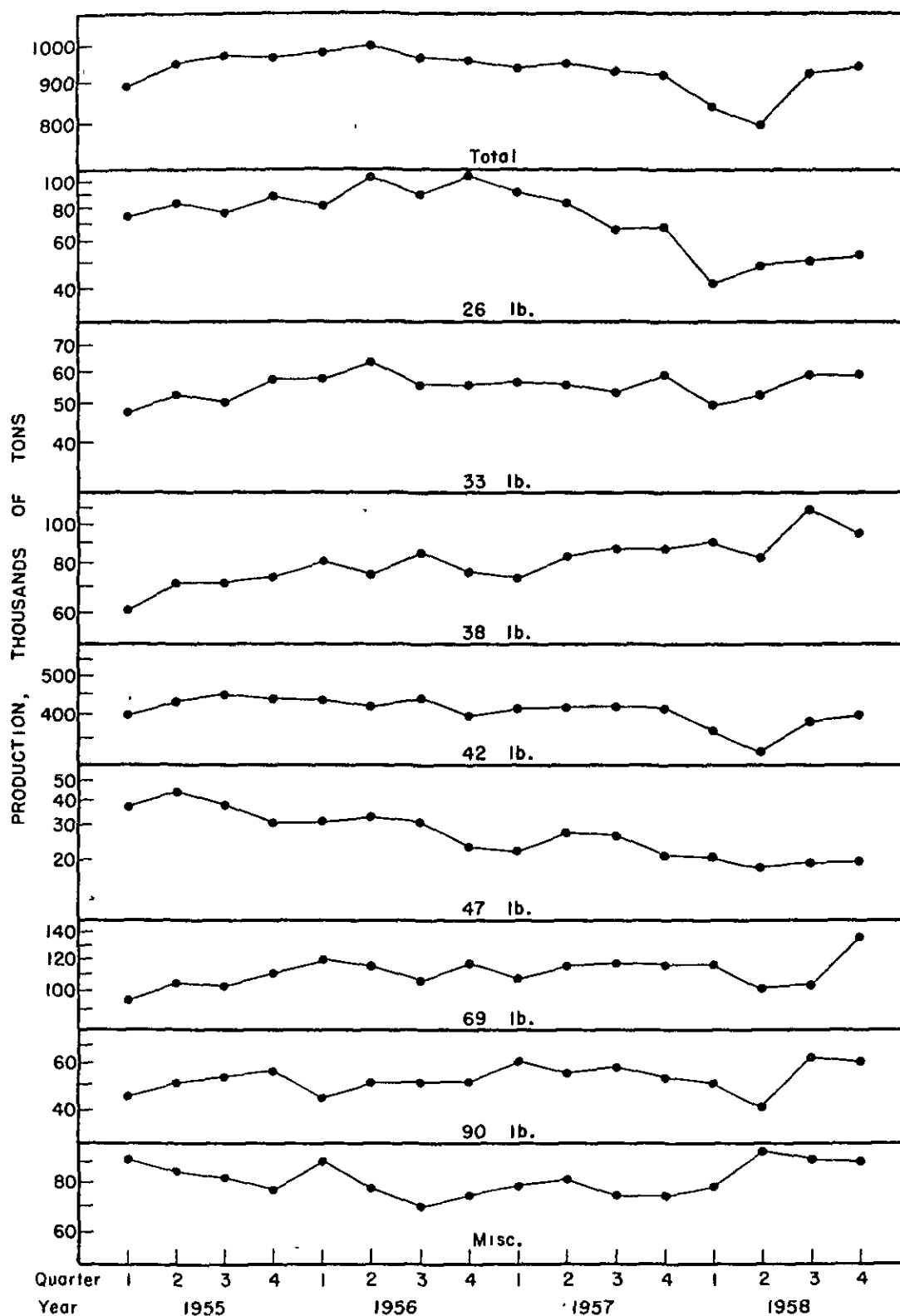


Figure 10. Comparison of Percentage Changes in Production for All Grades.

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